# A BRIEF HISTORY OF THE STUDY OF GREEK VASE-PAINTING.

## By STEPHEN BLEECKER LUCE.

(Read April 19, 1918.)

The subject of this paper needs no apology, for the study of Greek vase-painting is of the highest importance to the classical archæologists and philologist.1 Their appeal is wide, and includes within the scope of their influence not only lovers of the classics, but all who love art and beauty. In the first place, they are all that we have left of the Greek painting of the Age of Pericles. This makes them at once of immense importance to the archæologist, who tries with their aid to reconstruct in his mind the masterpieces of Polygnotes and Zeuxis. To the philologist and the lover of literature, they are valuable as portraying the stories of mythology and history, often being far earlier than our extant literary sources for the myths they represent; to the student of manners and customs, the scenes from private life that they show are of supreme importance; while the archæologist finds pleasure and profit, not only from these things, but from the study of their chronology and technique. It has been truly said that the value of Greek vases is fourfoldethnological, historical, mythological and artistic.2

This paper deals with an attempt to bring together, in a brief and usable form, the history of the study of these painted vases as works of art and monuments of antiquity from the beginnings of archæological research till the present day. This has been done before,<sup>3</sup> but it seems to me that there is need of bringing together the

<sup>&</sup>lt;sup>1</sup> I shall not discuss in this paper the chronology of the Minoan pottery of Crete, or the history of the discoveries of Evans at Knossos and Schliemann at Mycenae; for the culture that produced this civilization of prehistoric times is entirely different from that of the Hellenes, and is probably non-Greek.

<sup>&</sup>lt;sup>2</sup> H. B. Walters, "History of Ancient Pottery," Vol. I, pp. 10-16.

<sup>&</sup>lt;sup>3</sup> Walters, *loc. cit.*, Vol. I, chap. I, and the Introduction to Pottier's Catalogue of the vases in the Louvre. See also Fowler & Wheeler's "Greek Archaeology," chap. I.

results of the investigations that have been carried on in this fascinating field. I shall, therefore, in this paper briefly summarize the most important events in this study, and in an appendix at the end will give a list of the museums containing collections of vases.

The beginning of the study of vases was in the end of the seventeenth century. In that earliest of treatises on archæology, Montfaucon's "L'Antiquité Expliquée" (Paris, 1719), mention is made of them; and some are published. Previously to this, however, examples had been illustrated in the Museum Romanum of La Chausse, or Caussius, in 1690, and, at about the same time, by Grævius in his Thesaurus. In these two books we find the first appearance of any reference to the painted vases.

It may be said that works on vases can be divided into five general types, all dependent one upon the other, but all equally distinct. In the first place, there are the handbooks and treatises (in which should be included doctoral dissertations) on the history and style of Greek ceramics, and various phases of the subject; secondly, the articles on vases, in archæological or philological periodicals; thirdly, catalogues of museums or private collections, and sale catalogues; fourthly, albums or portfolios of plates, usually accompanied with an explanatory text; and lastly, reports of excavations and acquisitions. Practically all the literature on the subject falls into one of these five heads, while some books combine two or three of them.

It is the album that started the study of ceramics, and has had the longest life of any of these classes. Usually an album or portfolio is a series of plates taken from vases in different collections. It can, however, consist of plates from one collection alone. It differs then from the catalogue in not attempting to describe or portray the entire collection, as a catalogue would, but only examples selected for their artistic excellence or archæological importance.

The ancestor of all modern albums of Greek vases is the monumental work of Giovanni Baptista Passeri, called "Picturæ Etruscorum in Vasculis." There are three volumes, the first appearing in 1767, the second in 1770, the third in 1775. This is to this day the approved manner of publishing an album, not all at once, but different parts in different years. Passeri gives the shape of every

vase he describes, but his drawings are crude and inaccurate, there is no attempt at chronology, and most of the vases he publishes are of the Apulian style, which is late and decadent. It will be noticed that he considers them Etruscan; but at that time it was almost the universal belief, as I shall point out a little later.

The next series of albums are nearly all of private collections, and the most important of these are the albums of the Hamilton Collection, the first by D'Hancarville (1766-67), the drawings of which are quite untrustworthy, and the second by Tischbein (1791-1803) called Vases d'Hamilton. Tischbein's is perhaps the first accurate album to be published; but he almost invariably omits the shapes of the vases he describes, which makes it hard to use him. Furthermore, most of the Tischbein vases are inaccessible, as a large part of the collection which is portrayed by him was lost at sea. A large number of Tischbein vases passed into the famous Hope Collection, and many of them figured in the Hope Sale at Chrystie's in the summer of 1917.

In 1808 and 1810, A. L. Millin brought out his "Peintures de Vases Antiques" in two volumes, an album of vases in various collections. This was republished in a cheap form in 1891 by Salomon Reinach, who gives the various present locations of the vases there published. Millin's drawings, from the archæologist's point of view, are almost worthless. The subjects were at the time the chief features of interest to scholars. The shapes are rarely, if ever, given, and the drawings are absolutely unreliable for the study of technique. A little better was the work of F. Millingen, whose "Ancient Unedited Monuments" (1822-26) contained publications of some vases, but whose "Peintures Antiques de Vases Grecs" (Rome, 1813) is really the beginning of good work in albums. Another typical album of this period is Dubois-Maisonneuve's "Introduction a l'Étude des Vases Antiques" (Paris, 1817). Many albums were also made of private collections such as "Vases de la Collection de Sir John Coghill" by Millingen (1817), (a collection now dispersed, but several vases from which figured in the Hope Sale) which showed a great advance on his previous work. Shapes are always given, and the drawings are more accurate. Then there is Laborde's "Vases de M. le Comte de Lamberg" (1813-24), a

collection now also dispersed, but most of which is in Vienna; and the album of the collection of the Duc de Luynes, that most active amateur of art, which is new in Paris in the Bibliothèque Nationale (Paris, 1840).

The most important album since Passeri, however, was F. Inghirami's "Pitture di Vasi Fittili" (Fiesole, 1833-37; republished in 1852-56 as "Pitture di Vasi Etruschi"). This is usually abbreviated as V.F., and it is still an important book. Inghirami issued other portfolios as well, the most important being his "Museo Chiusino" as album of finds from Chiusi, the ancient Clusium. The two albums of G. Micali, "Monumenti Inediti per Servire alla Storia degli Antichi Popoli Italiani" (1833; usually abbreviated as "Storia"), and "Monumenti Inediti" (1844) contain vases and are of considerable importance, as is a similar album, "Monumens Inédits," by the Frenchman, Raoul Rochette (1828).

But the most important and far-reaching of these early albums was Stackelberg's "Gräber der Hellenen" (1837), made up after travelling in Greece. This book stopped the "Etruscan theory" of which I shall now speak, from growing, and proved beyond peradventure the Greek origin of the vases.

Let us now consider what progress had been made in the study of vases by means of these albums. There were up to 1827, and, indeed, in a minor degree, up to the publication of Stackelberg in 1837, two theories as to the origin, the Etruscan and the Greek. The former view was held by all the earliest authorities such as Montfaucon and Passeri; but, in 1764, the great Winckelmann brought out his "History of Ancient Art." In this epoch-making book, and in his "Monumenti Antichi," which came out in 1769, he publishes some vases, and he saw at once that their spirit was that of Greece, not Etruria; he therefore called them Italo-Greek, suggesting Magna Græcia as the place of their production. He was followed by most of the French scholars, such as Millin, Millingen and Laborde; but the Italians, largely through national pride, held on to the Etruscan theory as long as it was possible to do so, and Inghirami called the vases Etruscan even as late as 1856. The discovery of vases in Greece, of course, confirmed the position of the Greek protagonists.

We have seen that up to the twenties and into the thirties of the last century vases were studied almost entirely through albums. Two new features now occur, which are of importance; namely, articles in periodicals, and reports of excavations. Museums, although they had been founded back in the eighteenth century, or even earlier, had not been catalogued, nor were there catalogues of private collections, other than the sort of albums to which reference has been made, with one exception, to be recorded below.

On the anniversary of Winckelmann's birthday, December 9, 1828, an event occurred of the first importance to archæology. There was founded in Rome by a group of scholars, the Instituto di Corrispondenza Archeologica, which later became the German Archæological Institute. The inspiration that doubtless caused this, the first scientific archæological society (for the Society of the Dilettanti in England cannot be seriously compared with it) to be formed, lay in the discovery of the Etruscan necropolises of Corneto, Chiusi, Cervetri, and other sites, and the phenomenal discovery of thousands of vases in Vulci in 1828, which led to a revival of the Etruscan theory, although it was not seriously considered by the majority of scholars. The institute began at once to publish two periodicals—the Annali dell' Instituto, devoted to articles, and the Bulletino dell' Instituto, devoted to reports of excavations and acquisitions of museums. With the Annali came separate plates, illustrating the articles (other plates being bound with each volume) which were later bound together in groups every two or three years. and, when bound, were known as the Monumenti Inediti del' Instituto.

It is at this time that one of the leading scholars of Greek vases makes his appearance, Eduard Gerhard, who is our first great name as a vase expert. He was director of the institute from its foundation till 1837, when he went to Berlin as archæologist for the museum. He recognized at once the importance of the vases from Vulci, and at first was inclined to think that there existed, in various sites in Etruria, centers for the production of vases under Greek influence. This was upheld by several other scholars, but later abandoned. Too little attention has been paid by students in general to Gerhard's excellent work, and too little credit given to him

for the advances he made in our knowledge, although his work was not as epochmaking as that of Otto Jahn, of whom I shall speak later.

Gerhard's most famous publication is his great album, published between 1840 and 1858, called "Auserlesene Griechische Vasenbilder," known usually to archæologists as A.V. Here, in 330 plates, he publishes about 350 vases, in every case giving the shape and the design as accurately as it was at that time possible to give it, with an explanatory text giving the location of each vase. It marked a great advance over any album previously published, and over the contemporary "Élite des Monuments Céramographiques" by the Frenchmen, Lenormant and De Witte. These volumes of Gerhard's are still important, and are fascinating to the archæologist, for the following reason:

Many of the vases published by Gerhard were seen by him "in the trade in Rome" and were there drawn. Of these many have since disappeared; and so we call them "lost vases." Anyone who has worked with vases long and faithfully is pretty likely to acquire a mental photograph of the more important "lost vases," which he carries around with him, aided by the actual republication of the A.V. in small line-drawings, by Reinsch, in the second volume of his "Répertoire des Vases Points," in 1900. If I, for instance, go to a new, or an uncatalogued museum, I look instinctively for "lost vases," which are mostly taken from Gerhard. In this way it has been my fortune to find many of them, in uncatalogued museums in America and Europe.

To return to our subject. Gerhard's next most important achievement was the foundation in Berlin of a new archæological periodical, the *Archaeologische Zeitung*, which lasted from 1843 till 1885. This was largely given over to vases. In the meantime, the Instituto di Corrispondenza was growing in importance, and other archæological societies were founded. In Greece, for instance, the 'Αρχαιολογικὴ 'Εταιρία was established in 1837, and in 1846, the French School at Athens, the first archæological school in order of foundation.

Gerhard was one of the first people to adopt a system of chronology for vases. He recognized an earliest "orientalizing" class, a black-figured, a red-figured, and a polychrome, developing from red-figured. This is the earliest attempt at a correct chronology, and, roughly speaking, these divisions are still good. There had been previous attempts at chronology, made by d'Hancarville, who, considering them Italian, dates the vases as lasting "from some centuries before the foundation of Rome" till the reign of Septimius Severus! Other attempts at chronology were made by Millingen, the Duc de Luynes and especially by Kramer<sup>4</sup> and Baron De Witte, whose classification is very practical.<sup>5</sup>

We have now come to the greatest name of all, perhaps, that of Otto Jahn, who brought out in 1854 the first scientific catalogue to be written, that of the Vasensammlung of the Pinakothek in Munich. Jahn's chronology is, in the main, the same as that of Gerhard, but he falls into the same error as his contemporary in Berlin in making the dates of the Attic black-figured and red-figured styles about a century too early in each case. Although a catalogue of vases in the possession of the Elector of Brandenburg had been written as far back as 1701, nevertheless Otto Jahn's Munich catalogue is the first scientific catalogue ever to be written. It serves two purposes; for it is not only a catalogue, but the introduction which precedes the description of the vases is the first systematic handbook to be written. This introduction was for many years the standard text-book on the history and chronology of Greek ceramics; while the catalogue proper minutely describes each vase in the collection, and at the back is a series of plates, giving the shapes of the vases, with each shape numbered. Against each vase in the text of the catalogue is given the shape, according to its number in the plates. Another series of plates copies the inscriptions found on the vases. This catalogue served as a model for about thirty years. All important catalogues were written in that manner, with plates of shapes and inscriptions in the back. The ultimate development of this form of catalogue is Furtwängler's of Berlin; but the first catalogue of the British Museum, and the catalogues of Naples, Petrograd, and many other museums were of the same order.

<sup>4&</sup>quot;Der Stil und Herkunft der griechischen Vasen," Berlin, 1837.

<sup>&</sup>lt;sup>5</sup> Sale Catalogue of Durand Coll., 1836.

In 1858, an Englishman, Birch, brought out his "History of Ancient Pottery," which is the first separate handbook to be written in any language, and was for a long time the standard book. A second edition appeared in 1873. In the meantime, largely through the good work of Birch, the English periodical, *Archaeologia*, the oldest of all archæological magazines, dating from 1770, began to publish important articles on vases.

We have now seen the beginnings of the systematic study of the Greek ceramographic art. The three most noteworthy developments to notice now in the modern growth of our knowledge of the subject are: (1) the discovery of the proper chronology of the vases; (2) the development of the modern illustrated scientific catalogue; and (3) the tendency towards the production of handbooks on general or special subjects connected with vases.

After Otto Jahn's catalogue, and until 1885, the interest in the study of vases grew steadily. Many catalogues were written, and many new periodicals started, which devoted much of their space to vases. The general value of archæology as a science was recognized, and archæological societies began to spring up.

The Franco-Prussian War of 1870-71 had, among other results, the effect of Germanizing the Instituto di Corrispondenza in Rome. It was one of the prices that Italy had to pay for entering Rome under Victor Emmanuel. And so this institute became generally known as the German Institute, although *Monumenti, Annali* and *Bulletino* continued to be published in Italian just as before till 1886. In 1874, the Germans established an archæological school (called Das kaiserlich deutsche archæologische Institut) in Athens, which began in 1876 the publication of its own Mittheilungen, a quarterly periodical, which contains many articles on vases.

The year 1879 is a notable one in the history of archæology, and therefore of vases, for that year saw the birth of the two leading archæological societies of the present day—the Archæological Institute of America, which was founded by Charles Eliot Norton and others in Boston in that year, and the Society for the Promotion of Hellenic Studies, or the Hellenic Society, which was organized in London at that time. In 1880, this latter society began the publication of its semi-annual Journal of Hellenic Studies (J.H.S.), one of

the finest archæological magazines there is, and, at its beginning, the very finest. In 1876, the Italian Accademia dei Lincei had begun its periodical, Notizie degli Scavi di Antichità, a journal devoted entirely to reports of excavations. It is of interest to say in this connection that the Italians have not ceased to carry on excavations and archæological research work in spite of the war, that the Notizie has not in any way suspended publication, and that, in southern Etruria, especially at Cervetri, I believe, some of the finest vases have recently been found that have ever come to light. We can see then, from the indications that I have mentioned, that, up to 1885 the study of archæology was making great strides, and that, naturally enough, it was helping along the interest in vases.

In 1885, however, two events of the first importance occurred, one of them epoch-making in its significance. This makes 1885 a date to be remembered, and put with 1764 (Winckelmann), 1767 (Passeri), 1828 (foundation of the Instituto di Corrispondenza), 1837 (final confirmation of Greek theory, by the publication of Stackelberg) and 1854 (Otto Jahn's Munich catalogue) as a milestone in the road towards a full knowledge of the subject. In that year, the 'Αρχαιολογική 'Εταιρία in Greece undertook the excavation of the Acropolis at Athens. Almost at the outset important data were found relative to the chronology of Greek vases. The fragments of pottery found in the débris which was used as filling material after the departure of the Persians in 479 B.C., and which obviously antedated the Persian invasion, contained Attic red-figured potsherds. This, of course, threw back the beginning of the redfigured technique, and also, of course the black-figured, which everyone agreed preceded it, to a much earlier date than had been supposed. This is the beginning of the working out of the true chronology of Attic vase-painting.

The year 1885 introduced other noteworthy developments as well. The Archæological Institute of America, which had founded the American School of Classical Studies in Athens, in 1881, began in this year the publication of the *American Journal of Archæology* (A.J.A.). This periodical, a quarterly, is now recognized as one of the leading scientific archæological journals in the world. Its present editor is Dr. J. M. Paton, of Cambridge, Mass. From the

start, it has taken an interest in vases, and published many good articles.

But next to the excavation of the Acropolis, the most important event of that year was the complete Germanization of the Instituto di Corrispondenza. The Monumenti, Annali and Bulletino stopped publication, and the headquarters of the institute moved from Rome to Berlin. Its name was now changed to Das kaiserlich deutsche archaeologische Institut, and the old building and splendid library of the Instituto became the headquarters of the German archæological school in Rome. At the same tmie, the German institute absorbed Gerhard's Archaeologische Zeitung. In place of the Annali, there is now issued a quarterly periodical, called Jahrbuch des K. d. archaeologischen Instituts, while the Monumenti has become the Antike Denkmäler. The Archaeologische Zeitung has been turned into a supplement to the Jahrbuch called Archaeologischer Anzeiger, devoted largely to reports of excavations, and particularly of acquisitions to museums, while the Mittheilungen of the Roman school has taken the place of the Bulletino. In all of these magazines, vases play a prominent part.

The modern illustrated scientific catalogue doubtless grew out of the sale catalogue. It is natural, when a large private collection is being sold, either at Chrystie's or the Hôtel Drouot, that the owners, or dealers acting for the owners, want to realize as large a price as they can. So that the sale catalogues early began to be rather sumptuous and to publish illustrations of the principal objects contained. Another determining factor, was, of course, the perfection of methods of photography, and the making of it cheap enough to use freely. Still, much use is made even now of drawings.

The first modern illustrated scientific museum catalogue that I knew of is Masner's of the Oesterreichisches Museum in Vienna, which appeared in 1891,6 and where most of the important vases are illustrated. But the best work of the nineties was done in England. The catalogues of the Ashmolean Museum in Oxford (1893) and the Fitzwilliam Museum in Cambridge (1896) are

<sup>&</sup>lt;sup>6</sup> Some steps in this direction were taken in Italy in the catalogues of the Jatta collection at Ruvo di Puglia, Italy, in 1869, and the Caputi collection in the same place in 1877, both of these catalogues being illustrated with plates of the more important unpublished vases. Both are by Signor G. Jatta.

models of what a catalogue should be, for the clearness and excellence of the text, and the beauty of the illustrations. In 1893, also, the new Catalogue of the British Museum, by Cecil Smith and Walters, began to appear, which marked an important step. In that year, too, Mr. Edward Robinson brought out his catalogue of the vases in the Museum of Fine Arts in Boston, which is now out of date, through no fault of his, but because Boston has doubled and trebled its collection since that catalogue was written.

The French have produced fine catalogues of the museums in Madrid and Athens, and especially praiseworthy is De Ridder's of the Bibliothèque Nationale in Paris: and M. Edmond Pottier, Conservateur de la Céramique Antique at the Louvre, and one of the world's leading authorities on the subject, has successfully combined catalogue and album in handling the collections in that museum, writing an unillustrated text catalogue, which brief descriptions of the different vases, and with an introduction which, when it first came out, gave the best short summary of the history of Greek pottery and of its study that had up to that time appeared, while larger volumes contain separate groups of plates, which give photographs of selected specimens, with a good account of each vase illustrated, including a complete bibliography of its previous publications, if any. The Catalogue of Athens was by Collignon in 1878; but a new edition, written in collaboration with the late Louis Couve appeared in 1902, with an atlas of plates, and a supplementary catalogue, covering accessions since that year, also with an atlas of plates, was brought out by Georges Nicole in 1912. Madrid was catalogued by the late Gabriel Leroux, one of the ablest of the younger French archæologists, who was killed at the Dardanelles.

In Italy, Pellegrini has produced, in 1900 and 1912, excellent catalogues of the collections of the Museo Civico at Bologna, but very little work has been done towards cataloguing the very rich museums of Italy, and the catalogues, where there are any, are mostly out of date, as in the case of Naples. I understand that the two leading collections in Rome, those of the Vatican and the Museo di Villa Giulia, will shortly become accessible to students by catalogues; but more important even than these is the cataloguing of

the small provincial museums, such as Chiusi, Corneto, Orvicto, Perugia and others, like Taranto in southern Italy and Syracuse in Sicily, all of which have splendid collections. Last of all, the Germans have come into the field, and a new catalogue of Munich was in progress before the war, the first volume of which, by Sieveking, made its appearance in 1912, and is a fine example of the modern illustrated scientific catalogue. The best work of the Germans, however, is in albums, of which Furtwängler and Reichhold's "Griechische Vasenmalerei," with explanatory text, continued by Hauser after Furtwängler's death, in 1907, is indispensable to any worker with vases, and a magnificent piece of work, while Riezler's "Weissgrundige Attische Lekythen," combining handbook and album, is also a very useful work.

But the genius of the present day lies toward handbooks, in which either the whole field, or parts of it, are studied and discussed. The Germans, with their minute plodding, and absolutely uninspired thoroughness, have produced handbooks for the most part on small sections of the field such as inscriptions on vases, signatures, dedicatory inscriptions or καλός-names, and the like; very useful books, but for the most part of no literary merit, although the scientific archæologist must know them from cover to cover. Of these books, the most important is Paul Hartwig's "Die griechischen Meisterschalen des strengen rothfigurigen Stils," which has a text and an atlas of plates, and is invaluable for the study of technique.

England has given us, in H. B. Walter's "History of Ancient Pottery" (London, 1905), a reworking of Birch's out-of-date handbook, which is, even today, the standard text-book on Greek vases, not even superseded, in my opinion, by Perrot's "La Céramique D'Athènes" (Vol. X. of Perrot and Chipiez's "Histoire de l'Art dans l'Antiquité") which appeared in 1914, just before the lamented death of its author, and which is a very important book. But Walters remains the standard text, although there are many imperfectook, which is, even today, the standard text-book on Greek vases, in the years since it appeared. England has also produced probably the most inspired worker in vases alive today, though perhaps not as universal in his knowledge as some of the workers in France,

Germany or the United States, in Lieutenant J. D. Beazley, of Christ Church, Oxford. Before the war, Lieutenant Beazley had produced, principally in the *Journal of Hellenic Studies*, but also in other periodicals, a series of articles, little short of masterly, on the technique of Attic red-figured vases. He discovered a series of previously unknown vase-painters, and, so great was his knowledge of the museums of the world, that he was able to lay his finger on almost every extant vase by their hands. Since the war, some articles by him have appeared, but I understand that he is now (1918) engaged in war-work at the Admiralty, and naturally has no time for archaeological study. A book by him on vases in America will shortly appear.

In France, besides Perrot's book already referred to, Pottier has written a charming monograph, "Douris et les Peintres de Vases Grecs" (English translation by Miss Bettina Kahnweiler) in a popular style in the little series called "Les Grands Artistes." Collignon, the author of the Athens catalogues, in collaboration with the late O. Rayet, wrote a "Histoire de la Céramique Grecque" (Paris, 1888) which for nearly twenty years was the standard text on the subject, being only superseded by Walters. But the best work and the most useful that the French have done is that of M. Salomon Reinach, who has republished, in a form accessible to students, and very cheap, in two volumes, called "Répertoire des Vases Peints Grecs et Etrusques" (Paris, 1898 and 1900) a number of unusual and rare publications. In the first volume, he republishes the St. Petersburg "Comptes-Rendus" (an unwieldy and rare album), the plates of vases from the Monumenti, Annali, and Archaeologische Zeitung, also plates of vases from the defunct Italian periodicals Bulletino Archeologico Napolitano, Bulletino Italiano, and Museo Italiano di Antichità Classica, and the early plates of vases in the Ἐφημερὶς ᾿Αρχαιολογικὴ, the organ of the ᾿Αρχαιολογικὴ Έταιρία. In the second volume he republishes Millingen's Vases de Coghill, Gerhard's A.V., the albums of Laborde (Vases de Lamberg), the Duc de Luynes, and Tischbein (Vases d'Hamilton), and an album by Roulez of selected vases in the Museum in Leyden.

<sup>&</sup>lt;sup>7</sup> Since writing this I learn that Lieutenant Beazley has been promoted to captain.

In an earlier volume (Paris, 1891) he had republished the albums of Millin and Millingen. In every case, where known, he gives the present location of each vase he publishes. At the back of the "Répertoire," there is a splendid bibliography, which is brought up to date later by Walters.

American scholars have taken very kindly to vases, and the best short chapter on vases and their history and chronology ever written. is that by the late Professor J. R. Wheeler of Columbia, in Fowler and Wheeler's "Greek Archæology" (New York, 1909). Other names of good men and women who work in this field are Paul Baur of Yale, George H. Chase of Harvard, D. M. Robinson of Johns Hopkins, and especially J. C. Hoppin of Bryn Mawr, whose "Euthymides and his Fellows" has recently been published by the Harvard University Press, and is a very important book; Edward Robinson, director of the Metropolitan Museum in New York, who when connected with the Museum of Fine Arts in Boston, wrote the catalogue of their vases; and Arthur Fairbanks, director of the Museum of Fine Arts in Boston, who has written the standard book on that class of vases known as Attic White Lekythoi, and whose catalogue of the Boston vases is impatiently awaited. Among women, there is Miss Hetty Goldman of New York, who has written some excellent articles; Miss Gisela M. A. Richter of the Metropolitan Museum in New York, whose work is of the highest order; and Miss Mary Hamilton Swindler of Bryn Mawr, who published so ably the fine red-figured cylix owned by this Society, and who has published a number of most praiseworthy papers in the American Journal of Archæology.

The twelve great museums of the world, for vases as I would rank them, are: (1) The British Museum, (2) the Antiquarium, Berlin, (3) the Musée du Louvre, Paris, (4) the Museo Nazionale. Naples, (5) the National Museum, Athens, (6) the Alte Pinakothek, Munich, (7) the Museum of Fine Arts, Boston, (8) the Hermitage, Petrograd, (9) the Etruscan Museum of the Vatican, (10) the Metropolitan Museum, New York, (11) the Museo Civico, Bologna, (12) the Bibliothèque Nationale, Paris.

Thus one sees that this country possesses two collections of vases of the first rank.

A list of the museums of the world that contain collections of Greek vases will follow this article. Important museums are printed in italics.

MUSEUMS CONTAINING COLLECTIONS OF VASES.

ENGLAND.

London; British Museum. (Catalogue by C. Smith and Walters, in progress, all but Vol. I., part 1, being out. Vol. I., part 2, appeared in 1912; Vol. II. in 1893; Vol. III. in 1896; Vol. IV. in 1896.)

Victoria and Albert Museum. Uncatalogued.

Soane Museum. Uncatalogued.

Oxford; Ashmolean Museum. Catalogue by P. Gardner (1893). Cambridge; Fitzwilliam Museum. Catalogue by E. A. Gardner (1896).

Deepdene; Hope Collection. Dispersed at a Public Sale at Chrystie's in 1917. Sale Catalogue published in that year. A scientific catalogue by E. M. W. Tillyard is in preparation.

Edinburgh. Museum.

Harrow-on-the-Hill; Harrow School Museum Catalogue by C. Torr (1887).

Castle Ashby; Nothampton Collection.

Richmond; Cook Collection.

# FRANCE.

Paris; Musée du Louvre. Catalogue by E. Pottier (in progress).

Bibliothèque Nationale. Çatalogue by A. de Ridder (1902).

Petit Palais. Dutuit Collection. Album, but no catalogue.

Musée des Arts Decoratifs.

Musée Guimet.

Boulogne-sur-Mer; Musée Municipal. Guide by H. E. Sauvage (1898). See also E. Pottier in "Album Archéologique des Musées de Province" (Paris, 1890–1891; pp. 68–101).

Compiègne; Musée Vivenel. A catalogue (rare) exists.

Rouen; Museum.

Toulouse; Museum. Catalogue by Roschach, 1892.

Lyons; Museum.

Sevres; Museum.

Marseilles; Museum. Catalogue by Froehner (1897).

Amiens; Musée de Picardie.

Abbeville; Museum.

Beziers; Museum.

Nearly all the French provincial museums have small collections of vases.

### BELGIUM.

Brussels; Musée du Cinquantenaire. Catalogue (of Ravestein Collection) by Ravestein (1884).

#### GERMANY.

Berlin; Antiquarium. Catalogue by Furtwängler (1885). See also files of the Archaeologischer Anzeiger, for accessions since that year.

Munich; Pinakothek. Catalogue by Otto Jahn (1854). The first volume of a new Catalogue by Sieveking (1912) has appeared.

Würzburg: Antikenkabinet. Catalogue by Urlichs (1869-72).

Altenburg; Museum.

Bonn; Museum of the University. Description by Kekule.

Breslau; Museum. Catalogue by Rossbach (1899).

Brunswick; Museum.

Dresden; Antikensammlung. Catalogue by Hettner (1881). See also files of the Archaeologischer Anzeiger, as for all German Museums.

Frankfurt-am-Main; Städel-Institut.

Gotha; Museum.

Göttingen; Museum of the University. Description by Jacobsthal (1913).

Hamburg; Museum für Kunst und Gewerbe. Description by Ballheimer (1905).

Heidelberg; Museum of the University.

Karlsruhe; Museum. Catalogue by Winnefeld (1887).

Cassell: Museum.

Hanover; Kestner Museum.

Jena; Museum of the University.

Leipzig; Museum.

Hauser Collection.

Strassburg; Museum.

Schwerin; Museum.

Weimar; Museum.

Munich; Loeb Collection.

Würzburg; Banko Collection.

#### AUSTRIA.

Vienna; Oesterreichisches Museum. Catalogue by Masner (1891). Kunsthistorisches Museum. (Formerly Antikenkabinet.) Catalogue by Sacken und Kenner. See also Laborde's Vases de Lamberg.

University.

Cracow; Museum. See De Witte, Catalogue de la Collection a l'Hôtel Lambert, most of which went to Cracow.

Czartoryski Collection.

Prague; Pollak Collection.

Trieste; Museum.

Sarajevo; Bosnisch-herzegovinisches Landesmuseum. Catalogue by Bulanda (1912).

## ITALY.

Bologna; Museo Civico. Catalogues by Pellegrini (1900 and 1912). Corneto; Museo Etrusco Tarquiniese.

Florence; Archaeological Museum. Description by Milani (1913). Naples; Museo Nazionale. Catalogue by Heydemann (1872), out of date, but no other exists.

Ruvo di Puglia; *Jatta collection*. Catalogue by G. Jatta (1869). Caputi Collection. Catalogue by G. Jatta (1877).

Rome; Museo Etrusco al Vaticano. Catalogue in preparation. See also the album called "Museo Gregoriano" (Rome, 1842).

Museo di Villa Giulia. Catalogue in preparation. See Monumenti Antichi dei Lincei, vols. XIV., pp. 269-308, and XXIV., pp. 345-400.

PROC. AMER. PHIL. SOC., VOL. LVII, RR, DEC. 18, 1918.

Conservatori Palace. Before the war, a catalogue was contemplated by students of the British School at Rome.

Torlonia Collection.

Castellani Collection.

Hartwig Collection.

Syracuse; Archaelogical Museum. See Mon. Ant., Vol. XVII.

Taranto; Archæological Museum.

Adria; Museo Bocchi. Description by Schöne (1874).

Arezzo; Museum.

Capua; Museo Campana. Catalogue by Patroni.

Bari; Archæological Museum.

Chiusi; Museo Etrusco.

Girgenți; Archæological Museum.

Catania; Archæological Museum.

Biscari Collection.

Milan; Museo Poldi-Pezzoli.

Orvieto; Museo Civico.

Faina Collection. Catalogue by Cardella (1888).

Palermo; Museo Nazionale.

Parma; Museum.

Perugia; Museo Etrusco.

Turin; Museo dell' Università. Description by Fabretti (1872).

Verona; Museum.

Other small museums, collections, etc., in Sicily and Sardinia:

Cagliari; Museum.

Caltanisetta; Museum.

Castrogiovanni; Museum.

Noto: Museum.

Terranuova (Gela); various private collections.

Catania; various private collections. Girgenti; various private collections.

# SWITZERLAND.

Zürich; Museum of the University. Catalogue by Blümner.

Geneva; Palais d' Ariana. Berne: Historical Museum.

#### Russia.\*

Petrograd; Hermitage. Catalogue by Stephani (1869).

Academy.

Stroganoff Collection(?).

Pisareff Collection(?).

Moscow; Museum.

Dorpat; Museum of the University.

Odessa; Museum.

Kertsch; Museum.

Nowikow Collection.

Kiev; Museum.

# SPAIN AND PORTUGAL.

Madrid; Archæological Museum. Catalogue by Leroux (1912).

Barcelona; Museum.

Lisbon; Museum.

## HOLLAND.

Leyden; Rijksmuseum. Catalogue by Holwerda (1905). See also Roulez, Choix de Vases Points du Musée de Leyde.

Amsterdam; Six Collection.

The Hague; Scheurleer Collection. Catalogue (The Hague, 1909).

DENMARK, SWEDEN.

Copenhagen; Thorwaldsen Museum. Catalogue by Birket Smith (1862).

Stockholm; Museum.

## GREECE.

Athens; National Museum. Catalogue by Collignon and Couve (1902) and a supplementary catalogue by Nicole (1912).

Acropolis Museum. Catalogue in progress by Botho Graef.

Various private collections.

Peiraeus; Museum.

Eleusis; Museum.

Thebes; Museum.

<sup>\*</sup> What conditions exist in Russia at present it is impossible to state. This is the ante-bellum condition.

Nauplia; Museum.

Myconos; Museum.

Delos; Museum. Impossible to take notes in this Museum.

ASIA MINOR, CYPRUS, AND EGYPT.

Smyrna; various private collections.

Nicosia; Cyprus Museum. Catalogue by Myres and Richter (1899).

Various private collections at various places on the Island of Cyprus.

Cairo; Museum. Catalogue by Edgar (1913).

Malta; Valetta Museum.

UNITED STATES.

Boston; Museum of Fine Arts. Catalogue by E. Robinson (1893), out of date. A new Catalogue has been promised.

New York; Metropolitan Museum of Art. Handbook by Miss G. M. A. Richter (1917).

Philadelphia; University Museum.

Memorial Hall.

Cambridge; Fogg Art Museum.

Collection of Classical Department, Harvard University.

New Haven; Yale University.

Baltimore; Johns Hopkins University.

Walters Collection.

Princeton, N. J.; Art Museum of Princeton University.

Worcester, Mass.; Art Museum.

Chicago; Art Institute.

Field-Columbian Museum.

St. Louis; Art Museum.

Stanford University, Cal.; Collection of Classical Department.

Brunswick, Me.; Walker Art Gallery, Bowdoin College.

Washington; National Museum.

Australia and New Zealand.

Sydney; Nicholson Museum, University of Sydney. Catalogue by Louisa Macdonald (1898).

Auckland, N. Z.; Museum.